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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,665	10/20/2000	Herve Andrean	06028 0016	9090
7590 04/05/2004				
Finnegan Henderson Farabow Garrett & Dunner 1300 I Street NW Washington, DC 20005		EXAMINER ELHILO, EISA B		
		ART UNIT PAPER NUMBER 1751		

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/622,665

Applicant(s)

ANDREAN ET AL.

Examiner

Eisa B Elhilo

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-100 is/are pending in the application.
- 4a) Of the above claim(s) 21-25, 30-37, 40, 41, 54, 55, 58-60, 64-72, 75, 76 and 78 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-20, 26, 27, 38, 42, 44-53, 56, 57, 61, 62, 73, 77 and 79-100 is/are rejected.
- 7) ☒ Claim(s) 28, 29, 39, 43, 63 and 74 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6, dated 8/22/00.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1 This Application is a 371 of International Application No. PCT/FR99/03245, filed on December 22, 1999, which claims the benefit of foreign priority under 35 U.S.C. 119, French Application No. 98/16379, filed on December 23, 1998.

2 Applicant's response filed on January 22, 2004, elected with traverse, the species:

(A) a compound of formula (VIII); and

(B) ketones.

3 The traversal is on the ground(s) that the Examiner has not explained why there is no single general inventive concept, nor has the examiner specifically described the unique special technical feature in each species.

4 This is not found persuasive because under PCT Rule 13.2:

The situation involving the so-called Markush practice wherein a single claim defines Alternatives (chemical or non-chemical) is also governed by PCT Rule 13.2. In this special situation, the requirement of a technical interrelationship and the same or corresponding special technical features as defined in PCT Rule 13.2, shall be considered to be met when the alternatives are of a similar nature.

When the Markush grouping is for alternatives of chemical compounds, they shall be regarded as being of a similar nature where the following criteria are fulfilled:

(A) All alternatives have a common property or activity; and

(B)(1) A common structure is present, i.e., a significant structural element is shared by all of the alternatives; or

Art Unit: 1751

(C)(2) In cases where the common structure cannot be the unifying criteria, all Alternatives belong to a recognized class of chemical compounds in the art to which the invention pertains.

In paragraph (B)(1), above, the words "significant structural element is shared by all of the alternatives" refer to cases where the compounds share a common chemical structure which occupies a large portion of their structures, or in case the compounds have in common only a small portion of their structures, the commonly shared structure constitutes a structurally distinctive portion in view of existing prior art. The structural element may be a single component or a combination of individual components linked together.

In paragraph (C)(2), above, the words "recognized class of chemical compounds" mean that there is an expectation from the knowledge in the art that members of the class will behave in the same way in the context of the claimed invention. In other words, each member could be substituted one for the other, with the expectation that the same intended result would be achieved.

In the instant claims: (a) comprises at least one compound of formulae (I), (II) or (III) which are related to the aliphatic carboxylic acids and there esters (class 560/231+), or at least one compound of formulae (IV) and (V) which related to pyrazole derivatives (5-membered heterocyclic ring comprising two nitrogen atoms) (class 548/300+), or at least one barbituric acid derivative of a formula (VI) (6-membered unsaturated heterocyclic ring containing one nitrogen atom) (class 546), or at least one pyridine derivative of a formula (VII) (6-membered unsaturated ring containing one nitrogen atom) (class 546), or at least one compound of formulae (VIII) or

Art Unit: 1751

(IX) (benzene ring attached to 5-membered heterocyclic ring having an oxygen, sulfur or nitrogen atom) (class 548, 549), or at least one compound of a formula (X) (6-membered heterocyclic ring attached to the 5-membered heterocyclic ring wherein the whole bio-cyclic compound comprises two nitrogen atoms) (class 548 and 546), or at least one compound of a formula (XI) (benzene ring attached to 6-membered heterocyclic saturated ring having a nitrogen atom) (class 546), or at least one compound of a formula (XII) (benzene ring attached to 5-membered unsaturated ring) (class 568), or at least one compound of a formula (XIII) (5-membered heterocyclic unsaturated ring having nitrogen and sulfur atoms) (class 548), or at least one compound of a formula (XIV) (5-membered heterocyclic unsaturated ring having two nitrogen atoms that attached to two benzene rings) (class 548), or at least one compound of formula (XV) (benzene ring attached to 5-membered saturated heterocyclic ring having two nitrogen atom) (class 548), or at least one compound of a formula (XVI) (a benzene ring attached to 5-membered unsaturated heterocyclic ring having an oxygen atom) class 549), or at least one compound of a formula (XVII) (4-membered unsaturated ring having an oxygen, sulfur or nitrogen atoms attached to 3-membered unsaturated ring) (class 548 and 549) and (b) comprises at least one compound chosen from aldehyde (class 568), ketones (class 568), quinones (class 568), diiminoisoindoline derivatives or 3-aminoisoindolone derivatives (class 548).

Further, applicant's instant claims do not contain a special technical feature that defines a contribution over the prior art (active methylene groups of 3-methylpyrazolone and acetoacetic acid, col. 5, lines 33-41, US. 4,196,145), (barbituric acid derivatives, col. 3, lines 64-65, US. 4,010,872), (rhodamines, col. 10, line 30, US. 6,106,578), (pyridone and hydroxyquinoline col. 2, lines 27-30 and col. 4, the table, line 5, US. 3,634,013), (pyridine, col. 16, lines 50-55, US.

Art Unit: 1751

5,628,799), (imidazopyridines, col. 1, formula 1, US. 5,980,585), (indanedione, col. 3, line 27, US. 5,595,197), aldehydes, col. 2, formula (IIa), US. 5,034,014)

Therefore, since the claims do not contain a special technical feature, which defines a contribution over the prior art, the examiner may determine within a single claim that the inventions are not so linked as to form a single general inventive concept.

Therefore, the restriction for examination purposes as indicated is proper. The requirement is still deemed proper and is therefore, made FINAL.

5 Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6 Since no prior art be found to anticipate or render obvious the elected species, The examiner has extended the search of the Markush-type claim with respect to a nonelected species, and accordingly, claims 21-25, 30-37, 40-41, 54-55, 58-60, 64-72, 75-76 and 78 are withdrawn from further consideration.

Claim Rejections - 35 USC § 112

7 The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26-27 and 61-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1751

Claims 26, 27, 61 and 62 are indefinite because the claims recite the limitation "2,6-dihydroxy-3-cyano-4-methylpyridine". There is insufficient antecedent basis for this limitation in these claims, because in the pyridine derivatives of a formula (VII), none of R13 and R14 recites a cyano radical.

Claim Rejections - 35 USC § 103

8 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-20, 38, 42, 44-53, 56-57, 73,77, and 79-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wenke (US 5,034,014).

Wenke (US' 014) teaches a method for dyeing hair comprising applying to the hair an aqueous composition comprising 2,6-dihydroxypyridine as a heterocyclic ring comprising a nitrogen atom (see col. 1, lines 5-8), which is similar to the pyridine compound of the claimed formula (VII), when in the claimed formula (VII), R14 and R13 are both hydrogen atoms. The composition also comprises aromatic aldehyde of a formula (IIa) (see col. 2, lines 55-68), which is similar to the claimed formula (XVIII), when in the reference's formula (IIa), m and n are both = 1 and X1 is a hydroxyl radical and when in the claimed formula (XVIII), R25 is represented by the formula (XVIII A), in which R26 and R27 are both hydrogen atoms and R28 is a substituted aryl group. The composition further comprises 2,4-dihydroxybenzaldehyde as claimed in claims 38 and 73 (see col. 3, line 15), 4-dimethylaminobenzaldehyde as claimed in claims 44 and 79 (see col. 3, lines 13-14), salts such as hydrochloride or sulfates as claimed in claims 42 and 77

Art Unit: 1751

(see col. 6, line 32), 0.5% to about 3% of 2,6-dihydroxypyridine as compound of an active methylene group wherein the concentration falls within the claimed ranges as claimed in claims 45-48 and 80-83 (see col. 3, line 36), from 3 to about 30% of organic solvents such as glycols and glycol ethers as medium suitable for dyeing as claimed in claims 53 and 95-97 (see col. 5, lines 66-68 and col. 6, lines 1-9), fatty acid diethanolamides and surfactants as surface active agents (see col. 5, lines 50-59), in the amount of from 0.1 to 40% which overlapped with the claimed ranges as claimed in claims 86, 89 and 90 (see col. 5, lines 63-65), from 0.5 to about 5% of a thickener as claimed in claims 91-92 (see col. 6, lines 14-34), polymers as hair conditioners (see col. 6, lines 10-12). The dyeing composition has a pH of about 5 to 7, which within the claimed ranges as claimed in claims 56 and 57 (see col. 5, line 38). Wenke further teaches a multi-compartment device or containers comprising the dyeing ingredients of aromatic aldehydes and 2,6-dihydroxypyridine and wherein the aromatic aldehydes are used as a solid material as cosmetically accepted water soluble salts as claimed in claims 98-100 (see col. 6, lines 28-44).

Although, Wenke teaches a method for dyeing hair and a hair dyeing composition comprising aromatic aldehyde of 4-dimethylaminobenzaldehyde and pyridine derivative of 2,6-dihydroxypyridine, the reference does not require such a dyeing composition comprising a pyridine compound of the claimed formula (VII), in which (R12) is an alkyl group or aryl group that attached to the nitrogen atom of the ring with sufficient specificity to constitute anticipation.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make such a dyeing composition because the reference teaches a pyridine compound structurally similar to those claimed. Therefore, one having ordinary skill in the art would have obtained the recited claimed compounds within the general disclosure of the

Art Unit: 1751

reference with the reasonable expectation of achieving successful composition for dyeing hair. Further, the similarities in chemical structure between the prior art and the claimed compounds and which have similar utilities establishes a prima facie case of obviousness. (In re Payne, 203VSPQ 245).

Allowable Subject Matter

9 Claims 28-29, 39, 43, 63 and 74 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose a dyeing composition comprising the limitations of the above claimed.

Conclusion

10 The references listed on from 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

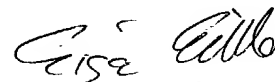
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 31, 2004



Eisa Elhilo
Patent Examiner
Art Unit 1751